Theoretical Computer Science

ICALP '97

Guest Editors

P. Degano
R. Gorrieri
A. Marchetti-Spaccamela

Volume 221, Numbers 1–2 (1999)

ELSEVIER

Amsterdam – Lausanne – New York – Oxford – Shannon – Tokyo

Theoretical Computer Science

Volume 221, Numbers 1–2, 28 June 1999

ICALP '96

Guest Editors: P. Degano
R. Gorrieri
A. Marchetti-Spaccamela

Abstracted/Indexed in: ACM Computing Reviews, Compuscience, Computer Abstracts, Current Contents: Engineering, Technology & Applied Science, Engineering Index/Compendex, INSPEC Information Services, Mathematical Reviews, Zentralblatt für Mathematik

Contents

Foreword

P. Degano, R. Gorrieri and A. Marchetti-Spaccamela 1

Contributions

A.E. Andreev, A.E.F. Clementi and J.D.P. Rolim
Worst-case hardness suffices for derandomization:
a new method for hardness-randomness trade-offs 3

Y. Bartal and S. Leonardi
On-line routing in all-optical networks 19

F. Bassino, M.-P. Béal and D. Perrin
Enumerative sequences of leaves and nodes in rational trees 41

B. Durand
Tilings and quasiperiodicity 61

P.L. Erdős, M.A. Steel, L.A. Székely and T.J. Warnow
A few logs suffice to build (almost) all trees: Part II 77

T. Erlebach, K. Jansen, C. Kaklamanis, M. Mihail and P. Persiano
Optimal wavelength routing on directed fiber trees 119

S.O. Krumke, H. Noltemeier, H.-C. Wirth, M.V. Marathe, R. Ravi, S.S Ravi and R. Sundaram
Improving spanning trees by upgrading nodes 139

G. Manzini and L. Margara
A complete and efficiently computable topological classification of
D-dimensional linear cellular automata over Z_m 157

K.R. Apt
The essence of constraint propagation 179

A. Bouajjani and P. Habermehl
Symbolic reachability analysis of FIFO-channel systems with nonregular sets of configurations 211

O. Burkart and B. Steffen
Model checking the full modal mu-calculus for infinite sequential processes 251

E.P. de Vink and J.J.M.M. Rutten
Bisimulation for probabilistic transition systems: a coalgebraic approach 271

P. Di Gianantonio
An abstract data type for real numbers 295

Y. Fu
Variations on mobile processes 327

T.A. Henzinger and P.W. Kopke
Discrete-time control for rectangular hybrid automata 369

K. Honda and N. Yoshida
Game-theoretic analysis of call-by-value computation 393

D. Sangiorgi
The name discipline of uniform receptiveness 457

Author index volume 221 495